

Biology 10



Course Information:

Instructor: Mr. Ekren

Course Number: #176

Credit Hours: 1 credit hour

Prerequisites: Successful completion of physical science

Room#: #108

Special Fees and/or Tools Needed for the Course:

A three ring binder is required to be used for science only. You need to purchase one for yourself during the first week of school or pick one up from me, I do have a few freebies. The binder will contain most of your classroom work over the year. It is a requirement that you bring the binder each day. Textbooks will not be handed out, but kept in the room for reference only. In addition you will need a journal with your name on it. This journal stays in the classroom so we have no issues with losing them. My signature and date is required if you ever need to use it for make-up work or study.

Field days: Please dress in clothes that you can get dirty and are appropriate for the weather and field conditions. It is a good idea to have a change of clothes in your locker in case you get wet.

Instructor Information:

Phone number (school): 218-338-6011 ext. 108

Email (best way to contact me): tekren@pp.k12.mn.us

Times available to meet with students:

Semester 1: 2nd & 4th period

Semester 2: 3rd & 4th period

(*Additional times available upon request)

Course Description/Content:

Lake Ecology: What factors affect the ecological balance in lakes? What factors specifically affect Lake Adley and Mountain Lake? How are those lakes the same or different?

Physical Processes: What is happening during photosynthesis and respiration and what affect does it have on you? How is life built on these processes? How do organisms respond to changes?

Diversity and Interdependence: How does the environment affect the physical structure of an organism? How are organisms dependent upon their environment and the other organisms in that environment? What affects are humans having on the global biosphere and how to plan for the future? In addition to your questions.

Biological Evolution: How do species change over time? What factors influence these changes? How does the history of life on this planet explain the diversity we see today? How is natural selection related to the survival of a species?

Cancer: What causes cancer? What cell changes take place during the development of cancer? What types of cancer exist and what puts us at risk? How is cancer treated and why is it treated in such a way?

Cells: How do cells divide? What types of cells are there and how do they differ? What is an enzyme? How is cell function specialized? How can cells solve environmental and health issues? What is the importance of dehydration?

Genetics: What are the structures of DNA & RNA and how do they relate to proteins? How are traits inherited? What causes diversity in organisms and how can DNA change? What are some genetic disorders and am I at risk? What are the ethical issues surrounding biotechnology?

Instructional Methods:

There will be no textbook for this class. Concepts and skill are learned through interaction with materials, labs, field investigations, direct instruction, and references. Homework is rare, most times sufficient class time will be given to complete assignments. In the past the most common cause for homework is inefficient use of class time. Collaborative groups will be common in class, but individual work will also be necessary at times so that I can see individuals work and assess our progress.

Course Policies:

Parents please note: Signing of the syllabus includes permission for your son/daughter to participate in all field investigation, including our day trip to Mountain Lake. This prevents you from having to sign additional permission forms every time we leave school grounds.

Assignments: Late assignments will receive a 50% reduction in score and assignments will not be accepted 3 weeks after their due date. A score of 0 will then be put into the grade book.

Attendance: Regular attendance is important so that you may stay on pace with the class. If you miss time *I will place your missed work in the fill folders along the north wall of the room. Always check there first when you are gone and then ask me if you have any questions. If you miss a quiz or test please see me right at the beginning of class.

Grading: You will be graded in two areas and those two areas are weighted accordingly.

- 1. Concepts/Investigations & Questions (80%)**
- 2. Work Habits (20%)**

A grade scale is located at the front of the room, it follows the standard 92%, 83%, 74%, 65%. Each major assignment will be accompanied by a checklist and a breakdown of how it will be scored. You will get this before we start so you have a better idea of what is expected of you.

Academic Dishonesty:

Science Department's Cheating Policy

Cheating will not be tolerated

Any offense for a student involved in cheating will result in a zero for that assignment, project, quiz, or test. If another person was actively involved in the cheating, that person will also receive a zero.

Plagiarism on an assignment will result in redoing the assignment for half the credit.

*All cheating will be reported to the Parkers Prairie High School Administration for discipline above and beyond my own.

**Remember that behavior that looks suspicious will be considered guilty and the disciplinary measures stated above would then be put into effect.

***The expression of opinions and viewpoints are encouraged in this class and are to be respected as opinions. They are however just that, opinion, and are useful in the encouragement and fostering of creative ideas. Please listen to classmates and also please express your view when appropriate.